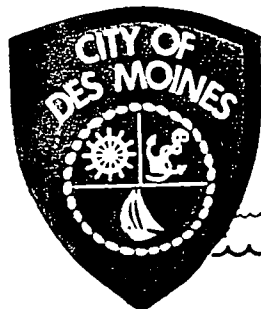


Neil 16.1 MWLSF



City of Des Moines

THE "Waterland" CITY

DES MOINES, WASHINGTON 98198



October 8, 1986

Councilwoman Virginia Galle, Chair
Environmental Management Committee
Seattle City Council
1110 Municipal Building
Seattle, Washington 98104

OCT 27 1986

Superfund Branch

Re: City of Des Moines Comments on Midway Landfill
Closure Plan

Dear Councilwoman Galle:

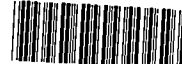
The following is a composite report of City Council adopted policy, Council delegated policy direction of the Council Midway Landfill Task Force, individual Councilmen, where not in conflict with Council Task Force direction and all branches of Des Moines City Administration. Final preparation and editing has been by the Des Moines City Manager and the Chairman of the Des Moines Council Midway Landfill Task Force. This report constitutes the City of Des Moines comment and response to the draft Midway Landfill Closure Plan dated September, 1986.

Earlier this year, the City of Des Moines protested what we believed was inadequate consideration of Des Moines' legitimate concerns about the effects of the Closure Plan and Seattle's preferred drainage alternative. Des Moines appreciates that Seattle has shown evidence of correcting this apparent lack of consideration of Des Moines' interests by signifying an intent to honor the City of Des Moines' Unclassified Use Permit requirements and by more direct communications between staff and committee members of both cities.

The City of Des Moines, meanwhile, has recognized a serious disincentive for the Des Moines Preferred Alternative (an underground pipeline) in its Unclassified Use requirement. The City Council has moved to correct this disincentive by proposing to exempt underground pipelines from the Unclassified Use process. The City Council will hold a public hearing to consider this change on November 13, 1986, at 7:30 p.m. at the Des Moines City Council Chambers.

21002

USEPA SF



1005120

878-8626

CITY HALL
21630 11TH AVE. SO.
878-4595

POLICE DEPT.
21640 11TH AVE. SO.
878-3301

MUNICIPAL COURT
21630 11TH AVE. SO.
878-4597

MARINA
22307 DOCK AVE. SO.
824-5700

PUBLIC V

21650

The City of Des Moines respectfully petitions for the right to add additional comments resulting from the Smith Creek Drainage Basin study which has just been commissioned. There are extremely valuable data to be obtained in the Smith Creek study which are critical to conclusions which may be reached by Seattle and Des Moines concerning surface drainage in the Smith Creek Basin.

The City respectfully requests that Seattle place the Closure Plan elements involving surface drainage on "hold" until the Smith Creek study is complete and the City of Des Moines has had time to reach its necessary conclusions. If Seattle should choose a pipeline alternative as its preferred method of discharge, which avoids open discharge, the Smith Creek Drainage Basin study is of less importance as a factor in determining the City of Des Moines' position on Landfill stormwater discharge.

The following is a capsule summary of the City of Des Moines response to the Closure Plan. The text of the document following this capsule summary is a detailed review of the City of Des Moines' position with respect to specific sections of the Midway Landfill Closure Plan.

1. The City of Des Moines does not believe that a thorough enough engineering and feasibility study has been done on the pipeline alternatives for Landfill surface water discharge and urges that stronger consideration be given to such alternatives.
2. The City of Des Moines does not believe that all of the engineering mitigation measures on Smith Creek have received adequate attention and requests that Seattle include the Des Moines Smith Creek Drainage Basin Study as part of it's Draft Closure Plan if any Landfill discharge is proposed to utilize the existing open drainage system of Smith Creek in the City of Des Moines.
3. The City of Des Moines believes that stronger consideration should be given to pre-closure and post-closure leachate pumping plans. Also, a more detailed monitoring program for leachate in surface water and a specific plan to prevent contaminants from reaching the Smith Creek Basin are seen as essentials to the Draft Closure Plan.

4. The City of Des Moines believes the closure treatment plan for potential leachate in stormwater needs improvement and that Seattle should consider an enlarged on-site detention facility of sufficient capacity to allow testing of surface run-off prior to release.
5. The City of Des Moines is concerned that development and closure costs should be assumed by the City of Seattle and that Seattle should defend and hold Des Moines harmless in all Midway Landfill related causes. The financial and staff resource burden upon Des Moines is grossly out of proportion to Des Moines' historic and current responsibility inherited by recent annexations.
6. The City of Des Moines believes that its input is vital into any post-closure plan development.
7. The City of Des Moines believes that Seattle needs to conduct additional historic research on natural drainage in the Midway Landfill area to verify the legality of the "wetland alternative".

The following is a detailed review of the City of Des Moines response to the Draft Closure Plan. The comments are generally in the order of the subject discussion in the Closure Plan. Direct quotes or references to the Seattle Draft Plan are full width and double spaced. City of Des Moines comments are indented, single spaced and each paragraph bears a "D/M" designation.

Section 1.0 Introduction

"Once approved, the plan will be utilized to obtain necessary permits for specific closure functions, guide the preparation of detailed engineering designs and construction plans, and provide the framework for post-closure operations and monitoring programs at the site.

D/M- The City of Des Moines believes that the plan should include more specifics before approval by the Seattle City Council. If approved as drafted this plan would likely be inadequate to obtain necessary permits for specific closure functions. Preparation of detailed engineering designs and construction plans could be made part of the overall closure plan process so as to be subject to public scrutiny. Certainly, the framework for post-closure operations and monitoring programs at the site would be enhanced by a more specific closure proposal.

Section 1.3 Regulatory Requirements

D/M- The City of Des Moines Unclassified Use Permit requirement is not listed. This process may be modified for pipelines. See Page 1.

Section 1. Table 1.1 outlines a list of those licenses, permits and approvals, which may be required to ensure compliance with these regulations.

D/M- Neither Section 1.0 nor Table 1.1 addresses the need for an unclassified use permit with the City of Des Moines regarding a storm drainage facility connected with a sanitary landfill. The City of Des Moines would encourage the City of Seattle to immediately initiate an application for the required Unclassified Use Permit (if open discharge through the City is the closure alternative) so as to minimize the time required for completion of the necessary off-site improvements, if approved. The City Council has voted to hold a public hearing to exempt underground pipelines meeting sanitary sewer specifications from the conditional use permit process. Such pipeline alternatives offer expeditious closure and the avoidance of a myriad problems for the public and Seattle.

Section 1.4 Relationship to Other Plans.

"The Midway Closure Plan will depend on the Kent Highlands Landfill to provide treatment and disposal of leachate, any contaminated surface waters not permitted for off-site discharge..."

D/M- Is the entire Kent Highlands facility to be closed this December?" If so, will adequate leachate treatment be available for Midway?

D/M- Comments made by a Kent City Councilwoman at the public comment period on September 23, 1986, questioned the ability of the Kent Highlands facility to adequately service large quantities of leachate contaminated run-off from the Midway Landfill site. The Kent Highlands Landfill Closure Plan must address long-term needs for leachate treatment stemming from Midway Landfill, including additional capacity. Furthermore the environmental impact statement should project worst-case leachate volumes toward assessing the ability of the leachate treatment facility to accommodate both landfill needs and determine whether METRO can accept these volumes after pretreatment at the Highlands facility.

D/M- The City of Des Moines is concerned that no remedial plan exists for pumping any existing leachate before the proposed cover is installed or the estimated two (2) million gallons of leachate generated due to percolation of surface water through the cap barrier. In addition, no plans have been proposed for containment or pumping of possible leachate contaminated surface run-off in the event of a cover failure or for leachate which percolates, rather than surfaces into the cover collection system.

"If other actions...

[D/M- besides those presented in the Draft Midway Landfill Closure Plan]

are required, they most probably would be considered supplemental and not contradictory to the programs recommended by this Closure Plan."

D/M- This statement is a legal conclusion. What authority is there to support such conclusion?

Section 1.5 Closure Plan Organization

"Develop programs to eliminate or substantially reduce environmental impacts due to leachate and landfill gas generation.

D/M- The closure plan addresses only future leachate, but doesn't discuss what's there now."

"The Midway Landfill Closure Plan is organized to effectively satisfy the following objective: Fulfill all federal, state and local laws relating to solid waste management and required permits."

D/M- This objective would seem to obligate the City of Seattle to follow the City of Des Moines unclassified use process regarding drainage or discharge facilities associated with the sanitary landfill facility. DMMC 18.32.020(11) (Ordinance No. 645, October 24, 1985).

D/M- In order to "Provide an efficient review/decision mechanism for regulatory agencies and City of Seattle and required permits," the Post Closure Operations Plan must be available to decision making bodies.

Section 2.0 Final Grading/Site Development Plan.

Section 2.2 Design Concept.

"Grades are designed to permit drainage during settlement of the fill which may be as great as 15 percent . . . Continual maintenance of surface grades may be necessary during the first five to ten (5-10) years after closure, and some regrading, including the necessary repairs to the leachate and gas control systems, may be required after the fill has stabilized to accommodate potential final uses."

- D/M Standard construction upon fills is not permitted for a minimum of one year after the fill has been placed to allow for settlement. Although a building is not being constructed on the landfill, the cover layers will be affected by settlement and should be designed to withstand the magnitude of such settlement.
- D/M The City of Des Moines Engineering Department, being concerned with long-term differential settling of the fill and the attendant effects of surface grades, is procuring for study long-term settlement data from other solid waste utilities operating landfills in Western Washington.

Section 3.0 Leachate Management Plan

"Key elements of this leachate management plan include: . .

Reduction of the infiltration of precipitation into the landfill through the development of a final cover system which includes a low permeability layer. . Collection, treatment, and disposal of leachate that may otherwise emerge as seeps on the surface at the toe of the landfill side slopes . . . Periodic monitoring of ground and surface water for evidence of leachate breakouts and subsurface migration."

- D/M Reduction of precipitation infiltration can occur only if the integrity of the cover is maintained. Settlement will cause breaks in the cover layer. Given the four inch clay layer, which is so shallow that the self-healing qualities of clay are considerably reduced, the cover may become so fragmented as to be ineffectual.

D/M Collection of leachate is discussed in the closure plan. However, treatment and disposal is left virtually unaddressed with references to a Post Closure Operations Plan which does not exist. A principal element of the leachate management plan is missing. How can the leachate management plan be evaluated on the basis of information which does not exist? Reliance on such a plan to make the kind of irreversible decisions contemplated both by the Cities of Seattle and Des Moines appears unreasonable.

D/M The Post Closure Operations Plan must speak to an on-site leachate treatment facility.

D/M Note comments made at Section 1.4 above.

D/M In addition, the City of Des Moines is concerned about the lack of a more specific monitoring program of ground and surface water for evidence of leachate breakouts and subsurface migration. While day to day monitoring might not be cost effective during normal weather patterns, it must certainly be considered as essential during periods of anticipated heavy precipitation.

D/M See comments for Sections 4, regarding ability of cap to contain leachate; and 7, regarding lack of control over post-operation monitoring and maintenance efforts.

Section 3.4 Surface Water Management Plan.

"A critical element of this surface water plan is the development of an outlet system which will successfully remove drainage from the landfill without causing adverse impacts to off-site properties and drainage systems."

D/M See comments in Section 5 regarding impacts. The critical "adverse impacts" element of the above statement can not be determined until completion of the Smith Creek Basin Study, now underway. The City of Des Moines believes that the FEIS does not adequately address adverse environmental impacts downstream from the wetlands discharge area or adequately explore the feasibility of pipeline alternatives.

Section 4.0 Final Cover System

D/M The City of Des Moines is concerned about the long-term integrity of the final cover system as proposed and the need to develop comprehensive contingency requirements for a major leachate breakout that would endanger downstream property and owners of such property.

D/M The storm drainage channel is depicted as lying immediately above the four (4) inch barrier layer and at the outer edge of the cover/barrier layer. A break in the barrier layer could allow storm water to enter the toe seep collection trench which could mingle with leachate and move back into the drainage ditch. Hydraulic pressures of fluids/gases below the barrier layer will bear on the probability of such an occurrence. The real protection from transmission of surface water into the refuse and also from transmission of leachate contained in the refuse breaking back through the cover into the surface water is the 1×10^7 cm/sec layer. This layer is only four inches (4") thick. It will be very difficult to construct a uniform 4-inch thick layer of soil over refuse. With a significant amount of settlement (15%) before cover installation and differential settlement of the refuse, after closure is complete, Des Moines believes the chances for breaks (and leaks) through the 4-inch layer are inevitable.

D/M How will anyone know where a break has occurred in the geomembrane wrap protecting the toe seep collection system or barrier layer? The potential problem with the cover system is the interface of the 6-inch toe seep collector and the 8 inches of base soil (under the bentonite amended soil). What protects the integrity of the toe seep collector? The base soil is a finer gradation than the gravel collector and will have a propensity to filter down into the gravel layer, filling in the voids in the toe seep collector. If the voids in the gravel layer are filled, it will not function satisfactorily (as intended in the design) as a leachate collector. Leachate then will take the path of least resistance which may be either through the cracks in the bentonite layer or back down through the refuse. Once again, there is substantial reliance on a plan which has not been developed.

D/M What will protect the surface water containment ditch from erosion? Presently a rock lined channel is proposed. Will a rock lining be sufficient to contain surface water and prevent erosion or migration of water around the edge of the cover layer to the leachate collection trench?

D/M If one advantage of natural materials is its flexibility and self-repairing quality, four (4) inches of clay or bentonite amended soil does not allow much latitude for differential settlement. The 4-inch layer also appears to be difficult proposition for repair and maintenance. How would cracks (other than obvious surface cracks) in the cover system be identified? How is it tested during construction to ensure continuity?

D/M The final cover system will be determined by the Department of Ecology as part of the remedial investigation/feasibility study. With a target completion date of Fall, 1987 for stormwater improvements completion, no time remains to adjust the surface water management plan pursuant to the remedial action plan recommendations. Enormous sums of money will have been expended.

D/M Can the City of Des Moines rely on the Department of Ecology to provide, through the remedial action plan, the level of protection envisioned so the water quality issue can be set aside? The City believes DOE should take a hard look at the cover system to ensure that it does what it is intended to on a long-term basis. DOE should get an independent engineer's evaluation regarding the constructibility of this cover system, the ability to enforce quality control during construction, and the ability for reasonably straightforward and effective long term maintenance.

D/M- A successful capping of the landfill requires: the ability to have it constructed properly (as designed) and the ability to monitor and maintain it on a long-term basis. The City of Des Moines has reservations as to whether the proposed cap lends itself well to these tasks.

Section 4.3 Construction Requirements Final Cover Plan

"The final cover will require periodic inspection and maintenance to correct any problems resulting from erosion and differential landfill settlement." "These inspection and maintenance requirements will be detailed in the Post-closure Operations and Maintenance Manual to be prepared prior to final construction completion."

D/M- In light of the potential adverse effects downstream due to leachate breakout, the City of Des Moines should be allowed input into the Post-closure Operations and Maintenance Plan.

Section 5.0 Surface Water Management Plan

D/M- Questions with respect to the adequacy of the 24 hour/25 year storm design are to be addressed in the Smith Creek Drainage Basin Study. The claim that peak flows will be less than the design standard (20 CFS) and average flows added by the cover should be examined.

D/M- The City of Des Moines is concerned about the adequacy of the current and proposed storm drainage system to meet the long term need of affected portions of the Smith Creek drainage system. Review of the Smith Creek Basin study, now underway by City of Des Moines Engineering Department, is an essential element in accurately assessing the long term downstream impacts from increased volumes of surface water run-off, both peak flows and average flows. (Average flows have not been mentioned in the closure plan.)

D/M- In addition, the City of Des Moines is concerned that on-site detention capacities are not great enough to adequately protect the North Fork of Smith Creek and lower sections of Smith Creek from flooding, significant scouring, etc.

Section 5.1.1 Recommended Plan

(c) Highway 99/West Discharge Route Statement

D/M- The proposed discharge will be to a drainage channel natural only to drainage from Highway 99 not to the landfill or I-5 run-off.

"This route corrects existing drainage problems between Highway-99 and the wetland."

D/M- These problems were not created by the City of Des Moines. The lawsuits pending at 246th and 28th Avenue should be between state, county and City of Seattle vs. private property owners. These drainage problems were not caused by any neglect of responsibility by our city. Seattle should straighten the record by giving Des Moines a retroactive defend and hold harmless agreement for Midway Landfill related litigation causes.

"This alternative causes disruption to the fewest ... properties and the least disruption to traffic ...transportation systems,... and public services..."

D/M- While short term disruption may be greater for a pipeline alternative, long-term disruption and risk should be considerably less and long-term cost should be comparable or less for a pipeline system.

"Involves the jurisdiction of only one municipality (City of Kent)"

D/M- This statement reveals the early disregard for input from the City of Des Moines in the closure process. The City of Des Moines is encouraged that Seattle is now seeking more Des Moines citizen and government input in the closure process.

"... is the shortest in length ... can be constructed in the shortest time for the lowest cost."

D/M- (a) Shortest is not always safest in the long run. (b) Lowest immediate cost to Seattle may not be the least expensive to residents that are immediately affected.

"Detention basin."

D/M- This is not a treatment facility. However, all treatment should be done on-site and frequently monitored.

D/M- "Des Moines is not convinced that the Green River [drainage] option has been fully examined. Why does the Green River option use a 100 year storm and western discharges use 25? Seattle should explore this option more thoroughly, especially in the light of the historic drainage patterns, a discussion of which begins on Page 15 of this report.

Section 5.1.1.c.

"The Highway 99 west discharge alternative is flexible and is capable of being extended along any one of the other alternative discharge routes if future conditions should warrant."

D/M- What conditions would warrant extension and abandonment of the North Fork of Smith Creek? Such a statement offers no assurance without a presentation of the criteria to be employed in making a determination to extend the along alternative routes.

D/M- If the cap system works, then the surface water discharged should be fairly clean. The City of Des Moines has concern about the reliability of the cap (expressed earlier) and possibility for leachate intrusion into the surface water system. Seattle maintains that the landfill cap will work; however, if it does not work, Seattle's fallback position is not clear. We need a better definition of what mitigating measures Seattle takes for improvement of the downstream system with their preferred alternate and also a better definition of what actions they would take to protect the downstream properties if the surface water becomes polluted.

D/M- The City of Des Moines believe that regardless of the route of the surface water run-off from the landfill, monitoring once in 3 months is not acceptable. In a 3-month period a large amount of water could be discharged which we would have no indication of quality control with this proposed monitoring effort.

D/M- Seattle should develop a "statistical process" control plan which identifies the parameters to be monitored and how Seattle will monitor the control limits. Seattle should know in detail what's going with the methane, leachate, surface settling, barrier integrity and contamination in surface water in both volume and percentage of contamination values.

D/M- Another potential problem occurs in controlling the quality of the surface water discharged with the detention system. This type of system has a constant discharge (during a storm event) albeit a relatively low discharge. Hence, the surface water is not really held on site, monitored and discharged; it discharges at a constant slow rate over a longer period of time. As the storm subsides, the pond empties. If a sample is taken and tests unsatisfactorily, the discharge has already been released downstream.

D/M- Des Moines appeals for an opportunity to make additional comments at a later date when Des Moines has modeling data available from the Smith Creek Drainage Study which is now underway. At this time Des Moines does not preclude the possibility of requiring detention facilities designed for a storm greater than the 25-year recurrence interval.

Section 5.3.2 Long Term Impacts/Mitigation

"The landfill cover will facilitate run-off of surface water and will maintain complete separation from any potential leachate contamination."

D/M- How can Seattle keep clean run-off separate from dirty run-off, especially when they plan to dump all of it in the detention pond?"

"Seattle accepts responsibility for M & O of all storm drainage facilities constructed under the closure, including off-site pipelines, detention basins, etc."

D/M- A complete inventory of these facilities must be developed which will satisfy the City of Des Moines. Such inventory cannot be prepared until the drainage basin study has been completed and should be included in the basin study scope of work."

Section 5.0 Surface Water Management Plan (Additional Comments)

This section notes that "the majority of drainage within the Midway vicinity (on-site and immediately east of I-5) drains or infiltrates directly into the landfill".

"Essentially, there is no surface outlet, either natural or man-made, from this drainage basin."

"The requirements of the Green River Management Agreement
.... do not actually prohibit stormwater discharge from the
Midway Landfill to the river. Furthermore, drainage plan
requirements specified in King County Code 20.50 and the
Storm Drainage Design Manual prohibit the diversion of
surface waters to non-natural discharge points as indicated
by the following statement: 'Under no circumstances shall
drainage be diverted in the proposed development to points
of discharge other than those points receiving drainage
prior to the proposed development.' (Section b Storm
Drainage Design Manual)"

"The Midway Landfill presents a unique situation in that
there is currently no discharge of stormwater from the
site. However, if the ponds on site overflow during a
storm and there was natural surface drainage to convey the
stormwater off-site, it flowed west towards Puget Sound via
Smith Creek rather than east towards the Green River."

D/M- The City of Des Moines agrees that the Midway
Landfill presents a unique situation, in that
there is "currently no discharge of stormwater
from the site". The conclusion reached, that
Puget Sound would be the destination of "natural
surface drainage ... via Smith Creek" may,
however, be misleading.

D/M- The issue to be considered is whether a westerly
discharge route at Smith Creek is the "natural
surface drainage" from the Midway Landfill
site. The City of Des Moines would assert that
"natural surface drainage" from the Midway
Landfill is determined from it's
pre-developmental period, not - as the
hypothetical at Page 5-2 suggests - at some

future point in time when "the ponds on site overflow during a storm...". Further, the City of Des Moines believes that "natural surface drainage" could only be determined by topographical studies done before the Midway sand and gravel pit was opened.

D/M- Army Corps of Engineer maps, compiled in 1953 from April 1943 aerial photographs, and obtained through U.S.G.S., indicate that the property on which the Midway Landfill is now situated was a wetland depression, approximately 300-350 feet above sea level, with no stream discharge points. This depression was referred to as "Lake Mead" in the public comments taken at Parkside Elementary School, Des Moines, on September 23, 1986. Two low areas of the landfill are mentioned in Section 7.4.3 "the base of the old gravel pit, and Lake Mead, which existed before the filling began." [Emphasis added]. For the purpose of this comment the depression will be referred to as the "Midway Wetland".

D/M- Preliminary evaluation of the topographical contours by City of Des Moines Engineering indicates that overflow drainage of the "Midway Wetland" could have been to the North-Northeast, under the Kent-Des Moines Road, 5(a), and then by stream to the Green River. If no overflow occurred from the Midway Wetland, then "natural surface drainage" was by percolation into the ground water.

D/M- The Draft Closure Plan states, at Page 5-2, "If the ponds on-site overflow during a storm and there was a natural surface drainage to convey to stormwater off-site it would flow west towards Puget Sound... rather than east towards the Green River". In the first instance, it is a questionable characterization that any drainage brought about by the addition of solid waste to a parcel of land is "natural". Second, "natural drainage", in any context, must also be read to include percolation of surface run-off into the groundwater. As there is "currently no discharge of stormwater from the site", natural drainage from the Midway Landfill is by percolation into the groundwater. These facts support the proposition that surface water run-off caused by a man-made semi-impermeable barrier would be artificial, rather than natural, drainage.

- D/M- The City of Des Moines asserts that because surface water run-off created by a man-made cap system is not the "natural drainage" from the Midway Landfill site under any reasonable definition of the term natural, the Smith Creek to Puget Sound discharge of diverted surface waters cannot be characterized as the "natural surface drainage" for the Midway Landfill site.
- D/M- Assuming, for the sake of argument, that the King County Code and Storm Drainage Design Manual, mentioned above, are to be applied in a literal sense, then "under no circumstances should drainage be diverted ... to points of discharge other than those receiving drainage prior to the proposed development."
- D/M- In addition, the City of Des Moines views as contradictory the contention that drainage from Highway 99 may be diverted into the Midway Landfill and still seek its natural drainage path into the Des Moines wetland. As Section b of the Storm Drainage Design Manual notes, "In the event that waters from this development drain into a critical flood, drainage, and/or erosion problem area, the quantity of water from this site may be restricted to the existing quantity leaving this site prior to development". [Emphasis added.]
- D/M- The above comments assume a historical, rather than present day, assessment of natural drainage. This is only proper because the problems presently facing citizens and municipalities adjacent to the landfill have their roots in practices that date back at least 25 years. To say that only current drainage patterns from the present site should be considered in dealing with surface water run-off is to ignore the long-term effects that the Midway Landfill development has had on the capacity of natural systems to absorb the direct and indirect environmental impacts of the existing site. Of necessity, the final determination of what constitutes "natural drainage" from the Midway Landfill would be made by a trier of fact.

Section 5.2 Construction and Operation Requirements

D/M- The City of Des Moines again encourages the City of Seattle to immediately initiate its application for the required Unclassified Use Permit so as to minimize the time required for completion of the off-site improvements. (See Section 1 Table 1.1 Comments on Page 2)

Section 6.0 Landfill Gas Management Plan Regulatory Requirements

D/M- Des Moines acknowledges that Seattle is working to mitigate the affects of Landfill gas and will comment further and participate in the remedial investigation.

D/M- Please refer to joint Des Moines and Kent statement of policy (Appendix 1) attached.

Section 7.0 Post-Closure Plan

"Figure 7-1 shows only 2 ground water wells west of 99".

D/M- Each element of the post closure plan, for which the City of Des Moines has regulatory authority, must be approved by the City when the Manual is prepared and decisions made about extra-facility construction.

D/M- The effectiveness of all other elements of the closure plan rests on the thoroughness and adequacy of the Post-closure plan. In fact, substantial holes in information and justification have been addressed by postponing detailed analysis to the Post-closure plan.

D/M- As noted in our comments to Section 4.3 above, the City of Des Moines should be allowed meaningful input into any post-closure plan.

D/M- The City of Des Moines is concerned about being included in the post-closure design and implementation procedure. This is especially so with regard to water quality monitoring, which will protect against introduction of leachate laden water into the drainage system. Des Moines believes that existing environmental documents do not adequately consider all the potential impacts closure according to the draft plan.

D/M- Des Moines believes this is not enough.

D/M- Des Moines believes that the stated "low areas",
(see page 7-13,) would be good places to start
leachate pumping! (See Section 7.4.3)

D/M- Mid 1988 is not soon enough to address on-site
polluted water.

Des Moines understands and appreciates the difficulties
Seattle must face to bring about a timely closure of the
landfill.

Des Moines encourages Seattle to:

1. Decide in favor of a pipeline discharge
alternative.
2. Consider the Smith Creek Drainage Basin
Study in the Closure Plan.
3. Provide plans for proposed engineering
mitigation measures on Smith Creek in
greater detail.
4. Give stronger consideration to pre-closure
and post-closure leachate pumping.
5. Develop a more detailed monitoring program
for leachate in surface water.
6. Develop a specific plan to prevent landfill
generated contaminants from reaching the
Smith Creek Basin.
7. Design an on-site detention system which
will allow testing of all surface run-off
prior to release.
8. All development and closure costs (i.e.
those associated with mitigating Midway
Landfill impacts on surrounding citizens and
affected properties) must be assumed by the
City of Seattle.
9. Conduct additional historical research on
natural drainage patterns in the vicinity of
the Midway Landfill.

The City of Des Moines encourages Seattle to weigh these elements heavily in favor of the innocent people who are or may be impacted by the long term effects of the Midway Landfill.

The City of Des Moines did not cause this problem and cannot afford to bear the financial consequences of being drawn into litigation as a result of it. Des Moines feels it is imperative that Seattle grant a Midway Landfill defend and hold harmless agreement similar to that which has been granted the City of Kent. Through such an agreement Seattle would assert that landfill problems will not be allowed to adversely affect the lives, properties or finances of the citizens and City of Des Moines.

Please see Appendix 1 for the text of the Joint Policy Statement of the City of Kent and the City of Des Moines Concerning Landfill Impact Mitigation by City of Seattle and Request for Action.

Respectfully submitted,

CITY OF DES MOINES

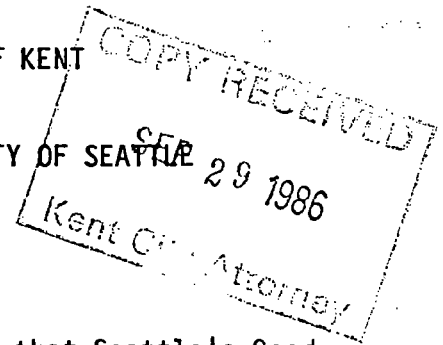
William C. Whisler *by direction* *Stan E. McNutt*
William C. Whisler *Susan Bouma* Stan E. McNutt
Councilman-Chairman Midway Landfill Task Force City Manager

Copies To::

Seattle City Council
Environmental Management Committee
Virginia Galle, Chair
Seattle Mayor Charles Royer
Seattle Solid Waste Utility
Richard Owings, Director
Des Moines City Council
Department of Ecology
Environmental Protection Agency
Eleanor Lee, State Senator, 33rd District
Lorraine Hine, State Representative, 33rd District
Dick Barnes, State Representative, 33rd District

JUL 29 1986

JOINT POLICY STATEMENT OF THE CITY OF KENT
AND THE CITY OF DES MOINES
CONCERNING LANDFILL IMPACT MITIGATION BY CITY OF SEATTLE
AND REQUEST FOR ACTION



1. Seattle Good Neighbor Program Boundaries.

The City of Des Moines and the City of Kent believe that Seattle's Good Neighbor Program, designed to mitigate the impacts of landfill contamination in offsite areas, should be amended to provide for program coverage to new West Hill neighborhoods in both municipalities. Neighborhoods should be included in which air quality and toxic air emission standards, promulgated by the Washington State Department of Ecology at WAC 173-304-460, are exceeded. This regulation requires an owner or operator of a landfill to reduce methane levels to 100 p.p.m. by volume of hydrocarbons (expressed as methane) in offsite structures. The City of Seattle should employ a case-by-case method for each affected parcel of property, in consultation with the City Engineers of Des Moines and Kent, for inclusion of such properties in the boundaries of the Seattle Good Neighbor Program. Seattle Good Neighbor Program boundaries for methane-related impacts should also include those properties within the influence of onsite and offsite methane extraction wells for the duration of Seattle's methane abatement program.

Seattle's Good Neighbor Program boundaries should also be expanded on a case-by-case basis for those properties where fair market value has been affected by leachate contamination, ground water contamination, or other factors related to landfill operation or closure.

2. Leachate Contamination of Surface and Ground Waters - Need for Interim Treatment with the Issuance of Environmental Impact Statement for the Midway Landfill Closure Plan.

Seattle has indicated that it is not feasible to remove trapped leachate until the final landfill cover system is completed. The Cities of Des Moines and Kent recognize that the planning, design, and construction of leachate removal facilities may take as long or longer than that required

for construction of a final site grading and cover system plan. However, it is of paramount importance that Seattle concurrently undertake facility planning, design, and removal of existing leachate. We believe that because some 98 million gallons of leachate currently exists beneath the Midway Landfill and approximately 48 million gallons generated annually enter the landfill, Seattle should implement a leachate removal schedule that will complement and operate with construction of the final cover system and other remedial actions at the site. The City of Des Moines and the City of Kent further request that trapped leachate be pumped and treated while a final cover system is being installed. The Cities request a detailed explanation of obstacles which prevent the immediate extraction of leachate.

3. Closure of Kent-Highlands on December 31, 1986.

The City of Kent has already entered into a comprehensive Settlement Agreement with the City of Seattle to close Kent-Highlands on or before December 31, 1986. Based upon information made available to the City of Des Moines, along with recent discoveries of methane gas located far offsite from both Midway and Kent-Highlands Landfills, it is also of paramount importance to the City of Des Moines that the Kent-Highlands Landfill close to all but clean fill as scheduled on or before December 31, 1986. The Kent-Highlands Landfill, like the Midway Landfill, is an aging landfill which is at or above capacity with many of the same and significant onsite and offsite problems which necessitated closure of the Midway Landfill in 1983. Closure of Kent-Highlands is necessary to preserve the environment and public health, and is necessary for continued economic growth in both municipalities. The Cedar Hills Regional Landfill is the only facility capable of safely receiving Seattle's and Kent's solid waste. The Cities of Des Moines and Kent oppose any efforts to keep Kent-Highlands open on the pretext of declaring any public health emergency through the Seattle-King County Health Department.

4. Surface Water Discharge From Midway Landfill.

The Cities of Des Moines and Kent together support the surface water management plan alternative which has the minimum impact upon the environment and potential risk to the public's health. Seattle's Final EIS for the closure of the Midway Landfill identifies a "preferred alternative" for surface water discharge. Any discharge plan as proposed by Seattle should await further study by the City of Des Moines and City of Kent. While Seattle has resolved certain issues with the City of Kent, Des Moines and Kent believe that the public interest would be best served by Seattle's serious consideration of other discharge alternatives that meet multiple municipal objectives. Des Moines and Kent agree that such studies should be completed on or before December 31, 1986 and should not in any way interfere with existing litigation and settlement negotiations between Seattle and private parties, or the expeditious closure of the Midway Landfill. We invite your participation in meetings with the respective city engineering departments to expeditiously resolve this issue.

Date: _____

9-19-86



DAN KELLEHER, MAYOR
CITY OF KENT

Date: _____

9-22-86



PAT DeBLASIO, MAYOR
CITY OF DES MOINES